

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 09/25/2006

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,128	09/10/2004	Patrizia Melpignano	APV31817	8838
24257 7590 09/25/2006			EXAMINER	
	AVIS MILLER & MOS	REHM, ADAM C		
1615 L STREET, NW SUITE 850 WASHINGTON, DC 20036			ART UNIT	PAPER NUMBER
			2875	

Please find below and/or attached an Office communication concerning this application or proceeding.

	-	Application No.	Applicant(s)	
		10/507,128	MELPIGNANO ET AL.	
•	Office Action Summary	Examiner	Art Unit	
·		Adam C. Rehm	2875	
Period f	The MAILING DATE of this communication a or Reply	appears on the cover sheet	with the correspondence address	
WHI - Exte afte - If N - Fail Any	HORTENED STATUTORY PERIOD FOR REF CHEVER IS LONGER, FROM THE MAILING ensions of time may be available under the provisions of 37 CFR or SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by state or reply received by the Office later than three months after the manned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUI 1.136(a). In no event, however, may od will apply and will expire SIX (6) M tute, cause the application to become	NICATION. a reply be timely filed ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).	
Status				
1)⊠	Responsive to communication(s) filed on 06	5 July 2006.		
•	·	his action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to				
. –	closed in accordance with the practice unde	er <i>Ex parte Quayle</i> , 1935 C	c.D. 11, 453 O.G. 213.	
Disposi	tion of Claims			
4)🛛	Claim(s) 1-20,22 and 23 is/are pending in the	ne application.		
	4a) Of the above claim(s) is/are withd	rawn from consideration.		
5)	Claim(s) is/are allowed.			
6)⊠	Claim(s) 1-20,22 and 23 is/are rejected.			
	Claim(s) is/are objected to.			
8)	Claim(s) are subject to restriction and	d/or election requirement.		
Applica	tion Papers			
9)[The specification is objected to by the Exam	iner.		
10)🗵	The drawing(s) filed on <u>06 July 2006</u> is/are:	a)⊠ accepted or b)☐ obj	jected to by the Examiner.	
	Applicant may not request that any objection to t			
·	Replacement drawing sheet(s) including the corr			
11)	The oath or declaration is objected to by the	Examiner. Note the attach	ned Office Action or form PTO-152.	
Priority	under 35 U.S.C. § 119			
	Acknowledgment is made of a claim for foreign All b Some * c None of:		C. § 119(a)-(d) or (f).	
	1. Certified copies of the priority docume		Anntination No	
•	2. Certified copies of the priority docume			
	3. Copies of the certified copies of the p		en received in this National Stage	
	application from the International Bure See the attached detailed Office action for a I		not received	
	See the attached detailed Office action for a f	ist of the certified copies i	iot received.	
A44mak				
Attachme	ent(s) lice of References Cited (PTO-892)	4) \prod Intervie	w Summary (PTO-413)	
	ice of Draftsperson's Patent Drawing Review (PTO-948)		No(s)/Mail Date	

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

Paper No(s)/Mail Date _

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

5) Notice of Informal Patent Application

6) Other: _____

Application/Control Number: 10/507,128

Art Unit: 2875

DETAILED ACTION

Page 2

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1-5, 8, 10-17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over C.F. MADIGAN ET AL, *Improvement of output coupling efficiency of organic light-emitting diodes by backside substrate modification*, Applied Physics Letters, March 27, 2000, at 1650 (published article) and BRASS ET AL. (US 6,979,104). MADIGAN discloses a lighting device (Fig. 3 generally) comprising:
 - An OLED/light source with positive and negative electrodes having point of light emission pixels between said electrodes (Fig. 3);
 - A partly transparent substrate for diffusing OLED light (Fig. 3);
 - A lenticular optical element/lens array on the substrate opposite to the
 OLED for diffusing light comprising a plurality of diffractive microlenses on
 a second face of said substrate to form an integrated structure to
 generate, emit and direct light (Fig. 3);
 - Wherein the microlenses are equal to each other (Fig. 3);
 - Wherein the substrate is made of plastic or glass (Table 1); and

Application/Control Number: 10/507,128

Art Unit: 2875

 Wherein the microlenses centers are shifted with respect to the relative point of light emission/the other of the mail axes (Page 1652, Column 2, Paragraph 3).

Page 3

- 2. While MADIGAN substantially discloses the claimed invention including an OLED, MADIGAN does not appear to disclose a light source with its optical axis laterally shifted from the central axis of a lens or lenses of different geometric configurations. However, BRASS teaches such (Figs. 11 and 18) for the purpose of yielding a beam with increased focus (Column 12, Line 62-Column 13, Line 14). It would have been obvious to one of ordinary skill in the art at the time of invention to modify MADIGAN and use the laterally offset light as taught by BRASS in order to obtain a beam with increased focus. BRASS further teaches lenses of different geometric configurations, i.e. different sizes (115, 117, Fig. 1). Notably, a change of any spatial attribute is considered a change of geometric configuration. Moreover, it has been held that a mere change of form or rearrangement of parts is necessary for patentability with such a change resulting in more than useful natural phenomenon that man has accumulated through common knowledge. Span Deck Inc. v. Fab Con, Inc., 215 USPQ 835. Thus, it would have been obvious to one having ordinary skill in the art to manipulate the lens configuration of MADIGAN in order to achieve a desired effect.
- 3. Regarding the method claims, the method of forming a device is not germane to the issue of patentability of the device itself. Therefore, these limitations have not been given patentable weight.

Application/Control Number: 10/507,128 Page 4

Art Unit: 2875

4. Claims 6, 7, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over C.F. MADIGAN ET AL, *Improvement of output coupling efficiency of organic light-emitting diodes by backside substrate modification*, Applied Physics Letters, March 27, 2000, at 1650 (published article). MADIGAN discloses the claimed invention including microlenses on a substrate (Fig. 3), but does not disclose microlenses or a substrate sized as claimed by applicant. However, it would have been obvious to one having ordinary skill in the art at the time of invention to decrease the size of the MADIGAN light device to lower material costs and decrease material processing time thus increasing process efficiency, since such a modification would have involved a mere change in the size of the existing components. Notably, changes in size are generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237.

Response to Amendment

- 5. Applicant's amendment has been received.
- 6. The drawing objections and 112 have been withdrawn.

Response to Arguments

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Page 5

Art Unit: 2875

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Rehm whose telephone number is 571.272.8589. The examiner can normally be reached on M-F 9-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571.272.2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/507,128 Page 6

Art Unit: 2875

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ACR 9/15/06

Mandia O'Shea
Supervisory Patent Examiner
Technology Center 2800